AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions:

1. (Currently amended) Apparatus for producing continuously molded bodies from a molding material, such as a spinning solution containing cellulose, water and tertiary amine oxide, comprising a multitude of extrusion orifices through which during operation the molding material can be extruded into continuously molded bodies, a precipitation bath and an air gap arranged between the extrusion orifices and the precipitation bath, and a blowing means for producing a cooling gas stream, the continuously molded bodies being passed during operation in successive order through the air gap and the precipitation bath, and the cooling gas stream being directed in the area of the air gap to the continuously molded bodies and exiting in a turbulent flow state from the blowing means, wherein the cooling gas stream has a Reynolds number (Re) of at least 2,500 based on its width (B), measured substantially in the direction of passage of the continuously molded bodies through the air gap, and on its velocity in the direction of flow, and the viscosity (v) of the cooling flow medium and wherein the width (B) of the cooling gas stream at the exit is not more than 2 mm.

2. (Canceled)

3. (Previously Presented) The apparatus according to claim 1, wherein the Reynolds number is at least 3,000.

4. (Currently Amended) Apparatus for producing continuously molded bodies from a molding material, such as a spinning solution containing cellulose, water and tertiary amine oxide, comprising a multitude of extrusion orifices through which during operation the molding material can be extruded into continuously molded bodies, a precipitation bath and an air gap arranged between the extrusion orifices and the precipitation bath, and a blowing means for producing a cooling gas stream, the continuously molded bodies being passed during operation in successive order through the air gap and the precipitation bath, and the cooling gas stream being directed in the area of the air gap to the continuously molded bodies and exiting in a turbulent flow state from the blowing means, wherein the cooling gas stream has a Reynolds (Re) of at least 2,500 based on its width (B), measured substantially in the direction of passage of

the continuously molded bodies through the air gap, and on its velocity in the direction of flow, and the viscosity (v) of the cooling flow medium, the velocity of the cooling stream is at least 30 m/s and the extrusion orifices have a temperature of up to 102°C.

5. (Previously Presented) The apparatus according to claim 4, wherein the velocity of the cooling gas stream is at least 40 m/s.

6. (Previously Presented) The apparatus according to claim 5, wherein the velocity of the cooling stream is at least 50 m/s.

7. (Previously Presented) The apparatus according to claim 4, wherein the width of the cooling stream at the exit is not more than 2 mm.

8. (Previously Presented) The apparatus according to claim 7, wherein the width of the cooling gas stream at the exit is not more than 1mm.

9. (Previously Presented) The apparatus according to claim 1, wherein the specific blowing force of the cooling gas stream is at least 5 mN/mm.

10. (Previously Presented) The apparatus according to claim 9, wherein the specific blowing force of the cooling gas stream is at least 10 mN/mm.

11. (Previously Presented) The apparatus according to claim 4, wherein the extrusion orifices are arranged in a plurality of rows in a direction transverse to the direction of the cooling gas stream and wherein the cooling gas stream is turbulent in the area of the first row of continuously molded bodies on which the cooling gas stream first impinges.

12. (Currently Amended) The apparatus according to claim 1, wherein the air gap comprises a first shielding zone by which the cooling gas stream is separated in a cooling area from the extrusion orifices.

13. (Currently Amended) The apparatus according to claim 12, further comprising, apart from the first shielding zone, a second shielding zone through which ~~a~~ the cooling area is separated from the precipitation bath surface.

14. (Currently amended) The apparatus according to claim 12, wherein a boundary area facing the extrusion orifices and located between ~~a~~ the cooling area and the first shielding zone extends substantially in parallel with a plane in which the extrusion orifices are positioned on average.

15. (Previously Presented) The apparatus according to claim 1, wherein the extrusion orifices are arranged on a substantially rectangular base in rows in a direction transverse to the direction of the cooling gas stream.

16. (Previously Presented) The apparatus according to claim 15, wherein the number of the extrusion orifices in the transverse direction is greater than in the cooling gas stream direction and wherein the velocity of the cooling stream is at least 30 m/s.

17. (Previously Presented) The apparatus according to claim 1, wherein the precipitation bath has disposed therein a deflector by which during operation the continuously molded bodies are deflected as a substantially planar curtain to the precipitation bath surface, and that outside of the precipitation bath there is provided a bundling means by which during operation the continuously molded bodies are united to form a fiber bundle.

18. (Previously Presented) The apparatus according to claim 1, wherein the width (D) of the cooling gas stream in a direction transverse to the direction of the passage of the continuously molded bodies through the air gap is larger that the height (B) of the cooling gas stream in the direction of passage.

19. (Previously Presented) The apparatus according to claim 1, wherein the cooling gas stream is composed of a plurality of individual cooling gas streams.

20. (Previously Presented) The apparatus according to claim 19, wherein the cooling gas streams are arranged in rows and wherein the width of the cooling gas streams at the exits is not more than 1 mm.

21. (Previously Presented) The apparatus according to claim 4, wherein the cooling gas stream is designed as a turbulent air flow in the area where the continuously molded bodies are passed through the air gap.

22. (Canceled)

23. (Canceled)

24. (Previously Presented) The apparatus according to claim 1, wherein the distance of a cooling area from the extrusion orifices in the direction of passage of the continuously molded bodies is at least 2 mm each time.

25. (Previously Presented) The apparatus according to claim 1, wherein the extrusion orifices are arranged in a plurality of rows and wherein a distance I of a cooling area in the direction of passage of the continuously molded bodies from each extrusion orifice in millimeters satisfies the following inequality:

$$I > H + A \bullet [\tan(\beta) - 0.14]$$

where H is the distance of the upper edge of the cooling gas stream at the exit of the blowing means in the direction of passage of the continuously molded bodies to the plane of the extrusion orifices at the exit from the blowing means in millimeters, A is the distance in a direction transverse to the direction of passage between the exit of the cooling gas stream of the blowing means in millimeters and the row of the continuously molded bodies that is the last one in the direction of flow of the cooling gas stream, in millimeters, and β is the angle in degrees between the cooling gas stream direction and the direction transverse to the direction of passage.

26. (Previously Presented) The apparatus according to claim 1, wherein the continuously molded bodies are extruded from extrusion orifices arranged in a plurality of rows in a direction transverse to the direction of the cooling gas stream and wherein the height L of the air gap in the direction of passage of the continuously molded bodies in millimeters satisfies the following inequality:

$$L > I + 0.28 \bullet A + B$$

where I is the distance of the cooling area from the extrusion orifices in the area where the continuously molded bodies are passed through the air gap, A is the distance in a direction transverse to the direction of passage of the continuously molded bodies between the exit of the cooling gas stream from the blowing means and a row of the continuously molded bodies that is the last one in the direction of flow of the cooling gas stream, in millimeters, and B is the height of the cooling gas stream in a direction transverse to the cooling gas stream direction at the exit of the cooling gas stream from the blowing means.

27. (Canceled)